

Basic Information

Product Name	Anti-NOX2/CYBB Antibody
Gene Name	CYBB
Source	Rabbit
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB, ELISA
Contents	500 ug/ml antibody with PBS , 0.02% NaN ₃ , 1 mg BSA and 50% glycerol.
Immunogen	E. coli-derived human NOX2/gp91phox recombinant protein (Position: F416-D500).
concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	65KD
Dilution Ratios	Western blot(WB):1:500-2000 (ELISA): 1:100-1000

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

NOX2(NADPH OXIDASE 2), also called CYBB(CYTOCHROME b(-245), BETA SUBUNIT), p91-PHOX or GP91-1, is a human gene encoding a glycoprotein. NOX2 is an essential component of phagocytic NADPH-oxidase, a membrane-bound enzyme complex that generates large quantities of microbicidal superoxide and other oxidants upon activation. It is mapped on Xp11.4. NOX2 assembled on DC phagosomes in a gp91-phox subunit-dependent manner, and that reactive oxygen species were produced in a more sustained manner in immature DC phagosomes than in macrophage phagosomes. As a major player in innate immune responses in neutrophils, NOX2 is also involved in adaptive immunity through its activity in DCs. In heart cells, physiologic stretch rapidly activates reduced-form NOX2 to produce reactive oxygen species (ROS) in a process dependent on microtubules (X-ROS signaling).

Selected Validation Data

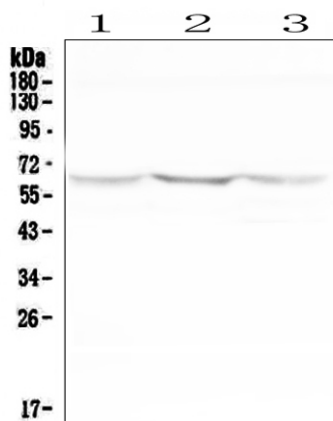


Figure 1. Western blot analysis of NOX2 using anti-NOX2 antibody (A00328). The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human U-87MG cell lysate, Lane 2: human Hela cell lysate, Lane 3: human HepG2 cell lysate. -NOX2 antigen affinity purified polyclonal antibody (Catalog # A00328) at 0.5 μ g/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for NOX2 at approximately 65KD. The expected band size for NOX2 is at 65KD.